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| APPLICATION NO.                           |       | FILING DATE  | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|---|-------|--------------|-------------------------|---------------------|-----------------|
| 10/609,415                                | •     | 07/01/2003   | Yoshiaki Hori           | 0505-1206P          | 9459            |
| 2292                                      | 7590  | 06/25/2004   |                         | EXAMINER            |                 |
| BIRCH                                     | STEWA | RT KOLASCH & | PANG, ROGER L           |                     |                 |
| PO BOX 747<br>FALLS CHURCH, VA 22040-0747 |       |              |                         | ART UNIT            | PAPER NUMBER    |
|   |       | ,            |                         | 3681                |                 |
|   | •     |              | DATE MAILED: 06/25/2004 |                     |                 |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.   | Applicant(s)   |  |  |  |  |  |
|---|---|--|--|--|--|--|--|
| ·   | 10/609,415  | HORI ET AL.  |  |  |  |  |  |
| Office Action Summary   | Examiner  | Art Unit   |  |  |  |  |  |
|   | Roger L Pang  | 3681   |  |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |   |  |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNI  - Extensions of time may be available under the provisions after SIX (6) MONTHS from the mailing date of this community if the period for reply specified above is less than thirty (3).  - If NO period for reply is specified above, the maximum states of the period for reply any reply received by the Office later than three months a earned patent term adjustment. See 37 CFR 1.704(b). | CATION. of 37 CFR 1.136(a). In no event, however, may a r unication. 0) days, a reply within the statutory minimum of thir stutory period will apply and will expire SIX (6) MON will, by statute, cause the application to become AE | eply be timely filed  y (30) days will be considered timely.  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133). |  |  |  |  |  |
| Status  |   |  |  |  |  |  |  |
| 1) Responsive to communication(s) file  | ed on   |  |  |  |  |  |  |
|   | 2b)⊠ This action is non-final.  |  |  |  |  |  |  |
|   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.                     |  |  |  |  |  |  |
| Disposition of Claims   |   |  |  |  |  |  |  |
| 4) ⊠ Claim(s) <u>1-17</u> is/are pending in the a 4a) Of the above claim(s) is/a  5) □ Claim(s) is/are allowed.  6) ⊠ Claim(s) <u>1-8,11 and 13-16</u> is/are rejocated in the a 7) ⊠ Claim(s) <u>9,10,12 and 17</u> is/are object  8) □ Claim(s) are subject to restrict  Application Papers   | re withdrawn from consideration. ected. ted to. tion and/or election requirement.   |  |  |  |  |  |  |
| 9) The specification is objected to by the Examiner.  |   |  |  |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |  |  |  |  |  |  |
| Replacement drawing sheet(s) including 11) The oath or declaration is objected to   | the correction is required if the drawing   | (s) is objected to. See 37 CFR 1.121(d).   |  |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |  |  |  |  |  |  |
| <ul><li>2. Certified copies of the priority</li><li>3. Copies of the certified copies</li></ul>   | documents have been received. documents have been received in A of the priority documents have been nal Bureau (PCT Rule 17.2(a)).  | pplication No received in this National Stage  |  |  |  |  |  |
| Attachment(s)   |   |  |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)   | Summary (PTO-413)   |  |  |  |  |  |  |
| <ul> <li>2) Notice of Draftsperson's Patent Drawing Review (F</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or Paper No(s)/Mail Date 11-3-03.</li> </ul>  |   | s)/Mail Date<br>nformal Patent Application (PTO-152)<br>   |  |  |  |  |  |

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#### **DETAILED ACTION**

The following action is in response to application 10/609,415 filed on July 1, 2003.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, and 3-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Oguri. With regard to claim 1, Oguri teaches a transmission comprising: an output shaft 14; a countershaft 13 extending parallel to said output shaft; an intermediate shaft 28 extending parallel to said output shaft; a forward drive gear 23a being rotatably supported relative to said countershaft; a reverse drive gear 27 being rotatably supported relative to said countershaft; a first intermediate gear 28a being rotatably supported relative to said intermediate shaft, said first intermediate gear meshing with said reverse drive gear; a second intermediate gear 28b rotatably supported relative to said intermediate shaft, said second intermediate gear being interlocked with said first intermediate gear to rotate therewith (Col. 2); an output shaft driven gear 23b fixed to aid output shaft, said output shaft driven gear meshing with said forward derive gear and said second intermediate gear; and a gear selecting and fixing device 33 axially and movably mounted on said countershaft for selectively engaging said forward drive gear (via 41) and said reverse drive gear to said countershaft. With regard to claim 3, Oguri teaches the transmission, wherein said forward and reverse drive gears, said first and second intermediate gears, and said

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output shaft driven gear are constant-mesh gears (Col. 2). With regard to claim 4, Oguri teaches the transmission, further comprising at least one hydraulic multi-plate clutch 41.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 6-8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oguri. With regard to claim 1, Oguri teaches the transmission, but lacks the teaching of said output shaft driven gear being the only gear attached to said output shaft. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Oguri to omit the remaining gears of different ratios on the output shaft, since it has been held that omission of an element and its function in a combination where the remaining elements perform the same functions as before involves only routine skill in the art. In re Karlson, 136 USPQ 184. With regard to claim 6. Oguri teaches the transmission, wherein said forward and reverse drive gears, said first and second intermediate gears, and said output shaft driven gear are constant-mesh gears (Col. 2). With regard to claim 7, Oguri teaches the transmission, further comprising at least one hydraulic multi-plate clutch 41. With regard to claim 8, Oguri teaches a first speed clutch 21c, a second speed clutch 22c; and a third speed hydraulic multi-plate clutch 41. Oguri lacks the teaching of said first and second speed clutches being hydraulic multi-plate clutches, however, it would been obvious to one of ordinary skill in the art at the time of the invention to modify Oguri to employ first and second speed hydraulic multi-plate clutches, since Oguri has

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already disclosed the teaching of a multi-plate clutch and in order to provide clutches with more accurate slipping ability. With regard to claim 11, Oguri teaches the transmission, wherein said gear selecting and fixing device is a dog clutch 33. Oguri lacks the teaching of said dog clutch being manually operated. It would have been obvious to one of ordinary skill at the time of the invention to modify Oguri to employ a manually operated dog clutch, since Oguri teaches of a manual transmission (Col. 1) and in order to provide more control to the operator.

Claims 5, and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oguri in view of Shinobu '328. With regard to claim 5, Oguri teaches the transmission, further comprising a main shaft 18 operatively engaged with a crankshaft (Fig. 1) and a torque converter 12. Oguri lacks the teaching of a primary driven gear. Shinobu teaches a crankshaft 10 operatively engaged with a main shaft 12 via a clutch and primary driven gear (Figure). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Oguri to employ a primary driven gear in view of Shinobu in order to save on lateral housing space. With regard to claim 13, see rejections of claims 1 and 5. With regard to claim 14, see rejection of claim 2. With regard to claim 15, see rejection of claim 3. With regard to claim 16, see rejection of claim 8.

# Allowable Subject Matter

Claims 9-10, 12, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

# Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mack, Matsufuji, Ohashi, Reece, and Inui have been cited to show similar transmissions.

# **FACSIMILE TRANSMISSION**

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (703) 305-3597. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

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(Signature)

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| Trademark Office (Fax No. (703) 305-3597) on(Date)   |
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|  |

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roger L Pang whose telephone number is 703-305-0445. The examiner can normally be reached on 5:30am to 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Roger L Pang
Patent Examiner
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June 21, 2004